5. A method of inhibiting oocyte activation during fertilization *in vitro*, the method comprising:

E2

contacting a non-activated oocyte with a nitric oxide synthase inhibitor; and

contacting said oocyte with sperm,

wherein said oocyte is inhibited from activation during fertilization *in vitro*.

15. A method of activating an oocyte *in vitro*, the method comprising:

contacting a non-activated oocyte with nitric oxide (NO), an NO donor, nitric oxide synthase (NOS), or inducer of NOS;

E3

contacting said oocyte with sperm to make an inseminated oocyte; and

maintaining said inseminated oocyte until the inseminated oocyte has undergone at least one cell division,

wherein an inseminated oocyte that has undergone at least one cell division indicates that the inseminated oocyte is activated.

II. REMARKS

Formal Matters

Claims 1, 3-5, 13 and 15 are pending.

Claims 1, 3-5, 13 and 15 were examined. Claims 1, 3-5, 13 and 15 were rejected. No claims were allowed.

Claims 1, 5 and 15 are amended. The amendments to the claims were made solely in the interest of expediting prosecution, and are not to be construed as an acquiescence to any objection or rejection of any claim.

Support for the amendments to the claims may be found in the claims as originally filed and throughout the specification, in particular at the following locations: page 14, lines 1-5 and page 17, lines 24 to 28, where descriptions of oocytes that are both non-activated and non-inseminated are described. Accordingly, no new matter is added by these amendments.

Please replace Claims 1, 5 and 15 with the clean version provided above.